

REMARKS

I. STATUS OF THE CLAIMS

Claims 1-7 and 20-35 are currently pending. Of these, claims 2-7 and 21 are withdrawn from consideration.

II. REJECTION OF CLAIMS 1, 20 AND 22-35 UNDER 35 USC 103
AS BEING UNPATENTABLE OVER INOUE

The present invention as recited, for example, in claim 1, relates to a light output control circuit comprising (a) a photodetector which detects the light output of a light-emitting device, to thereby provide a light output detection value; (b) a comparator which compares the light output detection value with a reference value, to thereby provide a comparison result; and (c) a light output control device which performs discrete control actions to control the light output of the light-emitting device in accordance with the comparison result.

Further, the light output control circuit comprises **a switching circuit which counts the number of control actions performed by the light output control device, and which instructs the light output control device to perform control in accordance with a power-up mode until the number of control actions after starting control reaches a predetermined value, and to perform control in accordance with a steady-state mode after the number of control actions has reached said predetermined value.**

For example, in FIG. 4, coarse/fine switching circuit 26 and other components in FIG. 4 together count the number of control actions, and instruct to perform control in accordance with a power-up mode until the number of control actions after starting control reaches a predetermined value, and to perform control in accordance with a steady-state mode after the number of control actions has reached said predetermined value. FIG. 5 shows detailed control, and shows operation in power-up mode and steady state mode.

As disclosed, for example, in column 13, lines 12-15, of Inoue, Inoue changes control mode based on the current value lth. Inoue does not disclose or suggest control based on the number of control actions as recited, for example, in claim 1. See also claims 20-35.

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The above arguments were presented in the Amendment filed May 9, 2003. However, in the outstanding Office Action, the Examiner asserts that the arguments are not

persuasive. More specifically, on page 6 of the Office Action, the Examiner asserts

"Accordingly, comparing the current value to I_{th} , and switching from power-up mode to steady-state mode based on the result [as in Inoue], is equivalent to comparing the number of incremental steps to a predetermined value, since iL is directly proportional to the number of incremental steps, and since I_{th} corresponds to a particular number of incremental steps."

Therefore, generally, the Examiner appears to assert that the changing control mode based on the current value I_{th} in Inoue, would be equivalent to controlling in accordance with a power-up mode until the number of control actions after starting control reaches a predetermined value, as recited, for example, in claim 1.

However, the Applicants respectfully assert that the control in Inoue is significantly different than that in embodiments of the present invention.

For example, by detecting the current value I_{th} , Inoue basically relies on the intensity of detected output light to determine when to switch control modes. See, for example, the Abstract of Inoue. As a result, if there is an error in the detected intensity, the control mode might not be properly switched.

By contrast, the present invention as recited, for example, in claim 1, uses a counter to count control operations. When to switch control modes is based on the number of control operations. As a result, even if there is an error in the detected intensity of emitted light, the control mode might still be properly switched as long as the proper "count" of control operations was obtained.

Moreover, it is respectfully submitted that no portion of Inoue discloses or suggests the use of a counter. Therefore, it is respectfully submitted that nothing in Inoue "counts" the number of control actions as recited, for example, in claim 1.

Further, claims 20-21, 23, 27 and 33 recite course/fine control, in combination with control based on the number of control operations. (See also claims 34 and 35, which recite somewhat similar features). Such combination of course/fine control with control based on the number of control operations provides significant advantages. For example, with such embodiments, the total number of control operations required to reach a steady-state value can be significantly reduced. See, for example, page 14, line 9, through page 16, line 10, of the specification. See especially page 16, lines 1-10. Inoue does not

provide such advantages.

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In view of the above, it is respectfully submitted that the rejection is overcome.

III. IDS

An IDS was filed on March 10, 2003. Form PTO-326 of the outstanding Office Action indicates that an acknowledged Form-1449 was attached to the Office Action. Presumably, this was an acknowledged Form-1449 of the IDS filed March 10, 2003. However, it appears that the copy of the Office Action received by the Applicant's representative from the USPTO did not include a copy of the acknowledged Form-1449.

Therefore, it is respectfully requested that the Examiner mail another copy of the acknowledged Form-1449 of the IDS filed March 10, 2003.

IV. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required in connection with the filing of this response, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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